# APPLICATION FOR A STATE DESIGNATED, FEDERALLY APPROVED NO DISCHARGE AREA FOR KENNEBUNK WELLS AREA – COASTAL WATERS BETWEEN MOODY POINT IN WELLS AND CAPE ARUNDEL IN KENNEBUNKPORT



Application prepared by:
Pamela Parker
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station.
Augusta, ME 04333-0017
Submitted November 13, 2008

# **TABLE OF CONTENTS**

INTRODUCT	TION3
CERTIFICAT	TION OF NEED5
Locati Acces	FACILITIES WITHIN PROPOSED NDA
	I AND ENFORCEMENT
Table 2. Res Table 3. Cor Table 4. Tot	mpout Station Locations and Accessibility
<b>FIGURES</b> Figure 1.	Boundaries of the Kennebunk Wells No Discharge area with Pumpout Station Locations
Figure 2.	Natural Resources in Kennebunk Wells No Discharge Area, Conservation Lands Wetlands, Shellfish, and Eelgrass Habitat8
Figure 3.	Natural Resources in Kennebunk Wells No Discharge Area, Shorebirds and Wildlife Habitat9
Figure 4.	Recreational Resources in Kennebunk Wells No Discharge Area10
APPENDIX A	

# INTRODUCTION

The Maine Department of Environmental Protection (MEDEP), is requesting that the United States Environmental Protection Agency (USEPA) allow the State's designation of the Kennebunk River –coastal waters between Wells Area Harbor and Porpoise Cove as a No Discharge Area (NDA) pursuant to the 33 CFR Part 159 and 40 CFR Part 140. Figure 1 details the geographic extent of the proposed NDA. An NDA is a body of water in which the discharge of vessel sewage, whether treated or not, is prohibited.

The point sources of pollution to the proposed Kennebunk River – Wells No Discharge Area (KWNDA) this portion of the Southern Maine coast are well regulated by the Clean Water Act and the State's water quality laws, as well as regulations through the Coast Guard, the MEDEP, and the USEPA. Maine has begun to address storm water contamination with an aggressive combined sewer overflow abatement plan, the enactment of the Storm water Management Law in 1998, and assumption of the federal stormwater program in 2001 and 2005. The MEDEP continues to identify and eliminate failing or illegal domestic waste water systems that discharge to the water, working closely with local municipal officials and the Department of Marine Resources (DMR). State environmental laws such as the Mandatory Shore land Zoning Act and the Natural Resources Protection Act are designed to control the development of sensitive coastal areas and to limit the amount of non-point source pollution. The state's Small Communities Grant Program (SCGP) funds the repair or replacement of many failing or illegal septic systems every year. Since its beginning in 1982, the SCGP has repaired or replaced approximately 3,500 septic systems throughout the state. The Overboard Discharge Grant Program (ODGP) is designed to eliminate approved discharges to targeted shellfish areas so those areas may be opened for harvesting. Since 1991, the ODGP has removed over 170 overboard discharge systems directly resulting in the opening of 4,500 acres of shellfish harvesting areas.

The proposed KWNDA is located within the boundaries of the towns of Kennebunk, Kennebunkport and Wells. The MEDEP in conjunction with municipalities and other interest groups have been working hard to reduce pollution going into KWNDA along Maine's southern coast and improve water quality in and around harbors, marinas and beaches. Revisions to Maine's Stormwater laws comprehensively address stormwater issues from development. The non-point source management program works through many venues, from flower shows to educate homeowners to contractor training, to educate people on the sources, impacts, and prevention measures for non-point source pollution. In the past 10 years over 37,940 acres of shellfish harvesting area have been opened statewide due to the elimination of landside overboard discharges and malfunctioning septic systems.

However, water quality issues remain including continued bacterial contamination. Sewage discharged from boats contributes to poor water quality, especially in poorly flushed embayments. Between 1970 and 2007, the number of registered boats on the Maine coast

more than quadrupled to 65,000. Of the registered boats in coastal waters, it is estimated that approximately 7,000 use marine sanitation devices (MSDs) of some kind. These numbers do not include the significant transient boat traffic estimated to be nearly 8,000 boats per year, almost all of which are cruising boats equipped with MSDs. The percentage of those nearly 15,000 boats that are equipped with holding tanks (MSDIIIs) is unknown but is estimated to be close to 98% (11,750).

Vessel sewage, like many other pollutants, can be harmful to the environment when it is not adequately treated. Sewage contains a high concentration of nitrogen, a substance that can lead to algal blooms and low dissolved oxygen concentrations that can affect the health of fish, shellfish, and eelgrass beds. Sewage also contains bacteria and viruses that can make shellfish unsuitable for human consumption and make our beaches unsafe for swimming.

Every boat with an installed marine head (toilet) must have a US Coast Guard approved Marine Sanitation Device (MSD). The US Coast Guard tests and certifies MSDs as Type I, Type II, or Type III. A Type I MSD means a device that, under the test conditions, produces an effluent having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible floating solids. A Type II MSD means a device that, under the test conditions produces an effluent having fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter. Type III MSDs are holding tanks designed to prevent the overboard discharge of any sewage, treated or untreated; although, some Type III MSDs are equipped with a "y" valve that allows the operator to legally discharge stored sewage once the vessel is more than 3 miles offshore. Boats larger than 65 feet in length must use a Type II or Type III MSD, while boats under 65 feet can use a Type I, II or III MSD.

While Type I and Type II MSDs are designed to treat vessel sewage, they do not remove significant amounts of nitrogen from the waste before it is discharged. They also cannot remove all of the bacteria or viruses. Certain waters of high public and environmental value that require greater environmental protection than under existing laws, can be designated NDAs under the federal Clean Water Act. Because there is a risk that sewage may negatively impact these sensitive areas, all vessel sewage, even if treated by a Type I or Type II MSD, is prohibited from being discharged in NDAs.

As a result, the MEDEP feels it is appropriate to request designation of Kennebunk River - Wells Area as a No Discharge Area. The area to be included in the designation includes all contiguous navigable waters.

# **DESCRIPTION:**

Waterbody/General Area	Longitude	Latitude
From "Moody Point" in Wells north to a point at the westerly head of navigation of the Webehannet River:	70° 33' 57.8" W	43° 19' 19.07" N
Northeast to the head of navigation of the middle fork of the Webehannet River:	70° 34' 143.98" W	43° 17' 12.21" N
Northeast to the head of navigation of the eastern fork of the Webehannet River:	70° 33' 32.54" W	43° 19' 25.8" N
East to the head of navigation of the Mousam River	70° 31' 35.53" W	43° 21' 44.16" N
East to the head of navigation of the Kennebunk River	70° 29' 3.77" W	43° 22' 23.52" N
East to "Cape Arundel"	70° 27' 58.36" W	43° 20' 25.42" N
Southwest in a straight line to Moody Point	70° 34' 14.98" W	43° 17' 12.21" N

The boundaries were chosen based on easy line-of-sight locations. See Figure 1

# **CERTIFICATION OF NEED**

The proposed KWNDA coastal area constitutes over 9 square miles of marine habitat. The intertidal zone includes a diverse array of habitats from rocky shore to large amounts of wetlands and salt marshes and flats. Due to topography and wide tidal variations characteristic of the Gulf of Maine, intertidal areas in Maine are the most extensive along the Atlantic Coast of the United States. Salt mashes, mud flat and fine sand beaches characterize most of the KWNDA with salt marshes are the most prevalent intertidal habitat. In the proposed NDA over there are over 19,700 acres of salt marshes.

A large number of big salt marshes can be found in between Wells and Cape Elizabeth. Tidal salt marshes are great primary producers. Terrestrial birds shorebird, shellfish and invertebrates, thrive off the oxygen these marshes give to their surrounding habitats. Specific species are habitat dependent upon salt marshes. They include amphipods, snails and ribbed mussels. Salt marshes also have the ability to support rare plants in some parts of Maine. Water quality alterations can have a profound negative affect on these marshes which can in turn weaken marsh systems.

Flats are also particularly important environments because they support a rich and abundant animal community. Changes in water quality from point and non-point sources of pollution can dramatically negatively affect mud flats, by changing community of animals which live in the substrate of a body of water, often on the ocean floor. Shorebirds, waterfowl, and wading birds feed on flats and in the creeks and shallow subtidal areas near flats and the open waters. The Maine DMR has recorded salt marshes and mud flats as being critical feeding grounds for many species of migrating and resident shorebirds.

Almost the entire proposed KWNDA is identified as a High Value Wildlife Habitat by the US Fish and Wildlife Service and contains the Wells National Estuarine Research Center and the Rachel Carson National Wildlife Refuge. Besides providing feeding habitat for raptors such as falcons, hawks and eagles, there are extensive shorebird roosting and feeding areas as well as tidal waterfowl and wader habitat. Waterfowl including many species of ducks and geese, loons, six species of heron, two species of egrets and glossy ibis frequent this area. The proposed KWDNA includes 672 acres of identified essential habitat for the federally endangered Piping Plover and Least Tern. Approximately 200 species of birds inhabit or migrate through the KWNDA.

From an economic standpoint, the shellfish harvesting areas are an important and valuable resource. Mud flats contribute to a multi million dollar seafood industry for Maine. These flats support shellfish, mussels, quahogs and baitworms. They also act as nurseries for winter flounder and other similar flatfish. Offshore harvesting areas include scallop and surf clam habitat. However, 100% of the total resource is closed to shellfish harvesting due to actual or threatened bacterial contamination. See Figure 2.

# **Water Quality**

The Maine Healthy Beaches Program has 17 monitoring locations along the extensive beaches included in the proposed KWNDA. Sampling since 2004 indicates sporadic elevated levels of *enterococcus* bacteria during the summer months with the highest recorded level of 833 colonies/100mL being found at the Laudholm beach in August of 2008<sup>1</sup>.

# Recreational

The KWNDA is one of the most popular beach areas in the state. There are 11 separate beaches that are often very crowded during the summer. In addition there are 3 large marinas in the Kennebunk River servicing roughly 485 boats. Due to the river's scenic location, boating facilities, and on-shore attractions, it is a popular destination for transient and local boaters.

The KWNDA is also a popular destination for sea kayakers, bird watchers and outdoor enthusiasts due to the huge area of salt marshes and wetlands. Most of the Webehannet River estuary and Little River estuary is publicly held conservation land, and is accessible by foot and small boat. The Rachel Carson National Wildlife Refuge has extensive trails and public education facilities. There are 4 campgrounds within 1 mile of the KWNDA. See Figure 2 for the conservation areas and Figure 4 for the recreation areas.

<sup>1</sup> Maine Healthy Beaches Program beach monitoring data Kennebunk-Wells No Discharge Area Application

Wells NDA.doc 12/4/2008

Figure 1.

Kennebunk River - Wells No Discharge Area
No Discharge Area and Pumpout Station Locations

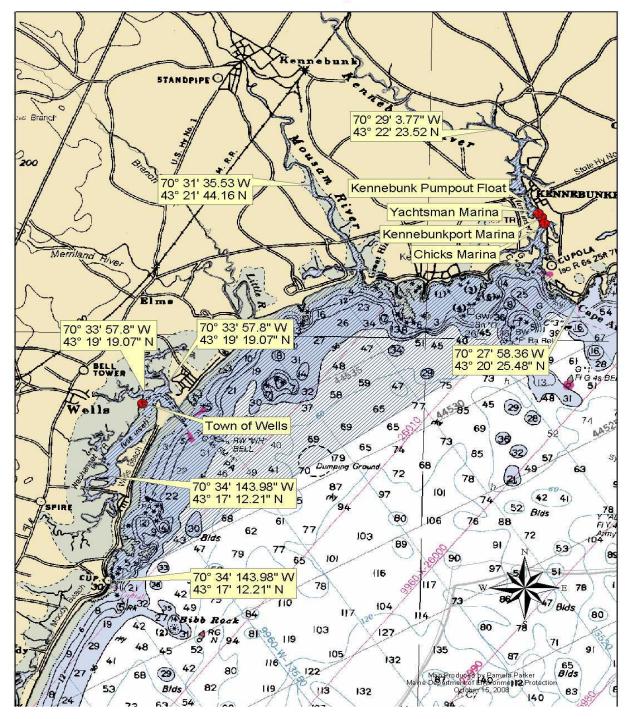


Figure 2. Conservation Lands, Wetlands, Eelgrass and Shellfish Habitat

# Kennebunk River - Wells No Discharge Area Resources

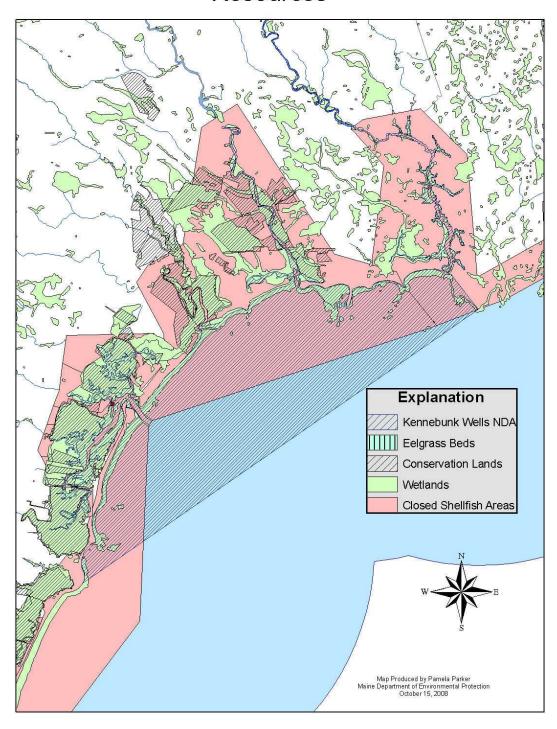


Figure 3. Shorebirds and Wildlife Habitat

Kennebunk River - Wells No Discharge Area

Resources

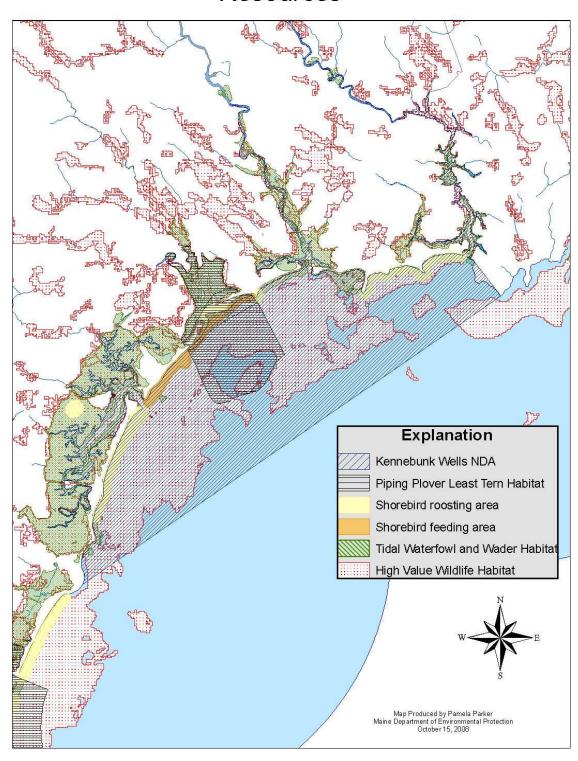
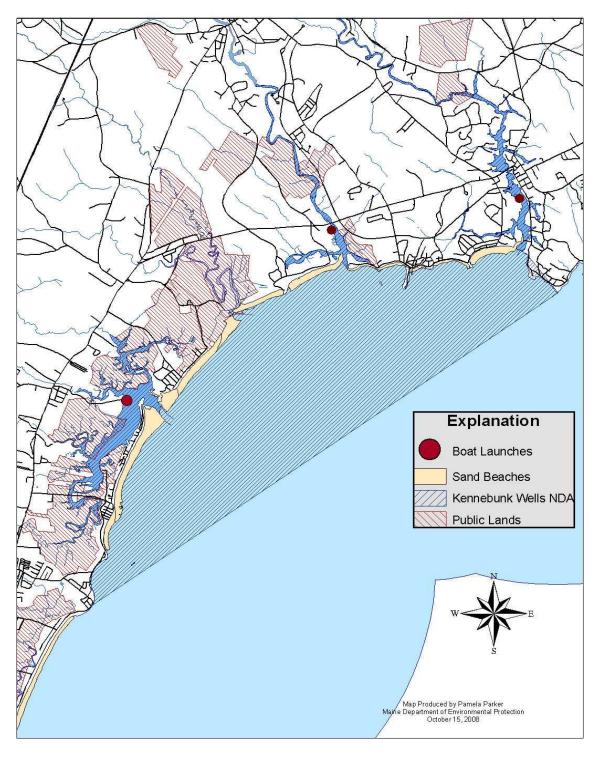


Figure 4.

Kennebunk River - Wells No Discharge Area
Recreational Resources



# **PUMPOUT FACILITIES**

# **Background**

Since 1993, Maine has worked toward increasing the availability of boat pump-out stations along the coast and increasing the public's awareness of the facilities through the Federal Clean Vessel Act funding. Until 1998, the grants were administered by the State Planning Office (SPO). Starting in 1999, the grant program has been administered by the MEDEP.

The MEDEP has been successful in a number of ways but there is plenty of work yet to be done due to rapidly increasing recreational boat traffic along the coast. The state has tripled the number of pump-outs available on the coast and, through education and outreach materials, has increased the level of pump-out use throughout the coast.

In 2000, MEDEP compiled an inventory and ranked all the roughly 350 navigable harbors in the state according to the number of boats normally sheltered, the harbor flushing capability, the presence of sensitive habitats, and the presence or absence of other known sources of pollution. After ranking, the MEDEP identified the top 100 as "significant" or "priority" harbors. After reviewing the pumpout priority list and discussing the feasibility of pumpout installation in some more remote areas of the coastline, the MEDEP has concluded that the pumpout station goal should be to have pumpout within 4 miles of all the priority harbors. Achieving this goal would ensure that a pumpout station is within one hour of all the significant harbors in the State.

As a tool for pumpout station installation, MEDEP has 38 M.R.S.A. §423-B. This section of law requires coastal marinas over a certain size to have operational pumpouts. All coastal marinas having a total of 18 or more slips and/or moorings for boats greater than 24 feet in length meet the threshold for pumpout requirement. All facilities that have installed a pumpout system and are subject to §423-B are also required to maintain their system in good working order. Facilities with pumpouts that are not subject to the requirements of §423-B but have received grant funds for their pumpout system are required to maintain their systems or refund a portion of the grant money they received. Since 2001, the MEDEP has conducted regular annual inspections of all pumpout systems to ensure that they function properly.

# A. Location

There are 5 pumpout stations serving boaters in the KWNDA. They are located at the Yachtsman, Chicks, and Kennebunkport Marinas, the Town of Wells public pier, and the Kennebunk River Committee pumpout float. The location of the pumpout stations can be found on Figure 1.

# B. Accessibility

Operating hours, contact information, pumpout system type, boat height and depth limitations are noted in Table 1. For the most part, pumpout facilities in the KWNDA are accessible and functional at high and low tides and have little to impede tall vessels. The MEDEP does not feel that the pumpout caddys located at the 3 major marinas in the Kennebunk River to adequately meet the need of customers at those marinas. With approval of the KWNDA, the MEDEP is confident that the marinas will upgrade their pumpout systems to better serve their customers. Most large commercial passenger vessels are able to be accommodated at the Wells town Harbor.

Table 1. Pumpout Station Location and Accessibility

	PO Type	Phone	Hours of Operation	JHA	Address	MLW Depth/ Length & Hight	Disposal	Fee/ Funding
Harbormaster Stationary 207	207		7-3	16	28 Sanford	Restrictions 10 ft	Sewer	\$5
646- 3226	646- 322	9:	Harbor		Rd	None		Public
28-gal cart 207	207		8-5. 7 davs/	6	59 Ocean Ave	10 ft	Sewer via	Variable
96	967-251	_	week	1		None	manhole	Private
28-gal cart 207	207		8-5, 7 days/	6	67 Ocean Ave	10 ft	Sewer via	Variable
967-3411	967-3411		week			None	manhole	Private
Chicks Marina 28-gal cart 207	207		9-5, 7 days/	6	75 Ocean Ave	10 ft	Sewer via	Variable
967-2782	967-278	2	week			None	manhole	Private
Pumpout 207	207		24/7	N/A	PO Box 566	8 ft	Pumped via	None
Float 967-4243	967-424	3	Self Serve			None	town operated	Public
							vacuum truck	
Pumpout Float							then	
							discharged to	
							sewer	

# C. Vessel population and usage

Data used in this application were collected through harbormaster boat registries as reported through a standard survey form and were confirmed by visual boat counts of boats of marinas and anchorages conducted by Environmental Protection Agency staff, and satellite imagery collected through Google Earth. The harbor master data was expected to be the most representative of the normal conditions in the harbors. Any differences among the data sets can be attributed to seasonal and yearly fluctuation. For the purposes of this application, the MEDEP assumes that all vessels with an installed head have an MSD. Therefore, the number of vessels with heads and the number with MSDs is assumed to be equal.

# **Recreational Vessels**

In the KWNDA there are roughly 485 recreational vessels with the majority being located in the Kennebunk River. The vessels appear to be privately owned recreational craft, ranging from under 16' to a number of large yachts well over 40 feet.

The Kennebunk Rivers marinas host a large number of resident vessels, with little room for transients. Most transients either pick up a mooring in the river, or tie alongside another vessel.

Table 2. Recreational Vessel Counts, Lengths and Location

Location		Boat Lengths in	n Kennebunk		Total #
	< 16'	16' – 25'	26' – 40'	> 40'	
Moored	7	6	43		56
Docked	48	162	55	7	272
Transient	0		2		2
Total:	55	168	100	7	330

Location		Boat Length	in Wells		Total #
	< 16'	16' – 25'	26' – 40'	> 40'	
Moored	4	120	30	1	155
Transient	0	0	0	0	
Total:	4	120	30	1	155

# **Commercial Vessels**

According to the Department of Marine Resources fishing license data, there are 155 commercial fishing vessels home ported out of the KWNDA. However, these vessels may not be launched or active or may be fishing out of a different location explaining the large discrepancy between the data provided by the harbormaster and the fishing license data. The 52 commercial vessels documented in the KWNDA through the harbormaster data range in size from 12' to over 60'. Of the fishing vessels, the majority are lobster boats mostly under 45'; the remaining boats are draggers and fin fishing boats.

Based on harbor master data there appear to be 18 commercial vessels in Wells Harbor, predominantly fishing vessels. It appears that the only commercial passenger vessels operating out of Wells are small charter fishing vessels, suitable for day trips.

Also based on harbormaster data, there are 34 commercial vessels in the Kennebunk River, two of which are chartered tourist boats, while the rest are lobster and fishing boats. Table 3 provides the breakdown of commercial vessels in the KWNDA.

All ferries and most excursion boats over 25 feet have heads on board and Type II or Type III MSDs. The presence of heads on fishing boats is variable, but for the purposes of this application MEDEP is assuming all commercial fishing boats are equipped with heads. This is probably a significant over estimate because, according to data provided by the Maine Lobsterman's Association, less than 10% of all lobster boats are equipped with installed heads or porta-potties.

Table 3. Commercial Vessel Counts, Lengths, and Location

	Boat Le	engths in Kennebunk	(	Total #
< 16'	16' – 25'	26' – 40'	> 40'	
2	3	26	3	34
	Boa	t Lengths in Wells		Total #
< 16'	16' – 25'	26' – 40'	> 40'	
0	3	14	1	18

All commercial vessels have access to the Wells Town Pier pumpout station and the Kennebunk River Commission pumpout float.

# **Vessels with MSDs**

Table 4 details the total number of recreational and commercial vessels with MSDs. The calculations used to determine vessels with MSDs was based on data developed by the Urban Harbors Institute<sup>2</sup> with the exception of anomalous data in the under 16 foot range due to survey ambiguity. For the purposes of this application, MEDEP will use the following percentages and will assume that all vessels with heads are equipped with an MSD.

0% of vessels less than 16' had MSDs 12% of vessels 16-25' have MSDs 86% of vessels 26-40' have MSDs and 95% of vessels over 40' have MSDs.

**Table 4. Estimated Total Vessels with MSDs** 

	Estimated		essel with MS unk River	Ds in the	
	< 16'	16' – 25'	26' – 40'	> 40'	Total
Total Boats	57	171	126	10	364
Estimated # without MSDs	57	150	18	0	225
Estimated # with MSDs	0	21	108	10	139

<sup>&</sup>lt;sup>2</sup> South Shore Pumpout Evaluation & Outreach Plan, Urban Harbors Institute, 2004 Kennebunk-Wells No Discharge Area Application Wells NDA.doc 12/4/2008

Table 4. Con't

	Estimate	ed Number of We	Vessel with Mells	SDs in	
	< 16'	16' – 25'	26' – 40'	> 40'	Total
Total Boats	4	123	44	2	173
Estimated # without MSDs	4	108	6	0	118
Estimated # with MSDs	0	15	38	2	55

In order to provide some estimation of the number of vessels that may need to be converted to Type III MSDs from their existing Type I or Type II, MEDEP used information from the Casco Bay No Discharge Area boater survey conducted in 2007 which found that 98% of vessels with heads were equipped with a Type III MSD. The results of these calculations can be found in Table 5.

Table 5. Estimated Total Number of Type III MSDs in the KWNDA

	Total Boa	its in Kennebun	k and Wells b	y length	Total #
	< 16'	16' – 25'	26' – 40'	> 40'	10tai#
Total Boats with MSDs	0	36	146	12	194
Estimated # of Type I and II MSDs	0	1	3	0	4
Estimated # of Type III MSDs	0	35	143	12	190

Based on these calculations there are approximately 194 boats with MSDs in the KWNDA and 190 of those already have a Type III MSD. As noted before, although in compliance with the law, the MEDEP does not feel that the pumpout caddie located at the 3 major marinas adequately serve their customers. However, the MEDEP is confident that the marinas will improve pumpout service for their customers by installing more efficient and effective units. Therefore, assuming there are 5 functional pumpout stations in the KWNDA, the pumpout system to vessel with Type III MSD ratio is 1:39, well within the guidelines established by the USEPA. The MEDEP concludes there are adequate pumpout stations capacity to service all the vessels of Wells Harbor and the Kennebunk River. If any areas appear to be underserved, MEDEP will work with the community to improve pumpout capability. Further, it appears that the burden of vessel conversion to a Type III MSD will be minimal to the local boaters.

# PUBLIC EDUCATION AND ENFORCEMENT

Education and enforcement plays an important role in the successful implementation of an NDA. The prohibition on discharging boat sewage in an NDA applies to all vessels, commercial and recreational, regardless of the Type of MSD on board. Information on and enforcement of federal laws related to MSDs is the responsibility of the US Coast Guard. States also have the authority to enforce the prohibition of vessel sewage discharges in NDAs, pursuant to 33 CFR Part 159. In the State of Maine the Maine Marine Patrol, part of the Department of Marine Resources, the Maine Wardens Service, part of the Department of Conservation, the State Police and some harbormasters have enforcement authority for watercraft.

MEDEP produces a pumpout brochure annually that identifies all the pumpout locations along the coast. These pamphlets are distributed to all facilities with pumpout stations along with

other boatyards and marinas. The MEDEP allocates at least \$7500 a year from the Clean Vessel Act Grant to education and outreach efforts.

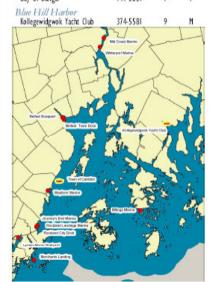
MEDEP will work with municipalities and marinas to provide and install adequate signage informing boaters of the NDA and will provide template language to help marinas and boatyards communicate the requirements to their customers. Further, the MEDEP will conduct direct mailings to registered boat owners in the towns surrounding the NDA. Cruising guides, local newspapers and boating magazines will all be informed of the changes with press releases and regular advertisements.

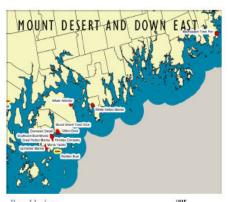
Prior to implementation of the NDA and then after the first year of the NDA, MEDEP plans to conduct an informal survey during the following boating season to determine the level of awareness among the boating public. Based on the results of the survey, Maine DEP will either perform additional outreach efforts targeted at the populations that seem to be less informed or will proceed with a small targeted enforcement project in cooperation with the local harbor master, the Marine Patrol and the Coast Guard. The purpose of the targeted enforcement project will be to 1) determine compliance trends and 2) get the word out that the NDA will be enforced 3) refine enforcement tools and methods. The enforcement team will try a variety of methods including boarding and inspection (particularly for resident boats in slips), and dying heads and holding tanks. The results of the enforcement project will be publicized with a press release and further public education efforts. Based on the indication of overall compliance revealed in the project the DEP will create an overall enforcement strategy that is reasonable and implement able on the local level.

# **APPENDIX A**

# **Sample Educational Materials**

### PENOBSCOT AND BLUE HILL BAYS Merchant's Landing Moorings 594-7459 Rockland Harbor City of Rockland 594-0312 594-4444 Journey's End Marina Landings Restaurant 596-6573 Camden Harbor Town of Camden 236-3353 Wayfarer Marine 236-4378 Belfast Harbor Belfast Boatyard 338-1142 City of Belfast 338-1142 Penobscot River Port Harbor Marine at Bucksport 469-5902 223-4781 Mid-Coast Marine 16 Winterport Marina 223-8885 City of Bangor 947-5251





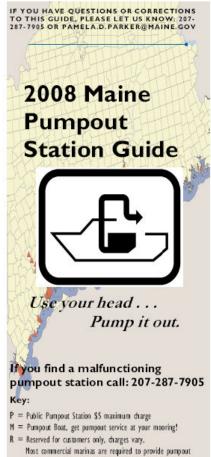
Bass Harbor		VHF	
Morris Yachts	244-5509	9	P
Red Fern Boat	667-1382	9	M
Up Harbor Marina	266-0270	9	P
Southwest Harbor			
Downeast Diesel and Marine	244-5145	9	P
Great Harbor Marina	244-0117	9	P
Hinckley Company	244-5572	9	P
Southwest Boat Marine Service	244-5525	9	P
Northeast Harbor			
Clifton Dock	276-3378	9	P
Town of Mount Desert	276-5737	9	P
Bar Harbor			
Bar Harbor Whale Watch	288-2386	9	P
Winter Harbor Winter Harbor Marine	963-7449	9	Р
Madiasport/Bucks Harbor			
Town of Machiasport	255-4516	9	P

Produced By: Maine DEP, Tyson Drive, Augusta, ME

Phone: 207-287-7905 Fax: 207-287-3435

E-mail: pamela.d.parker@maine.gov
This publication funded in part
with a grant from.

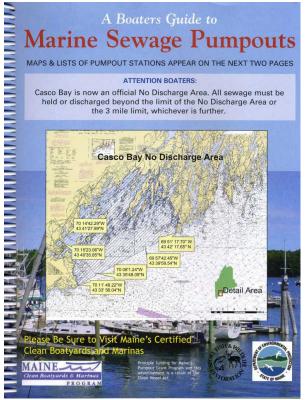


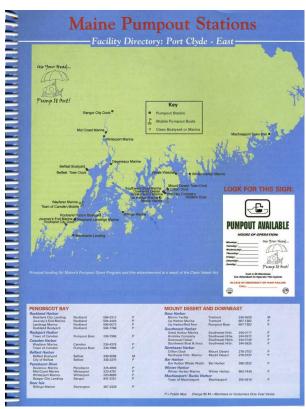


service to their customers. If you are refused service, call the

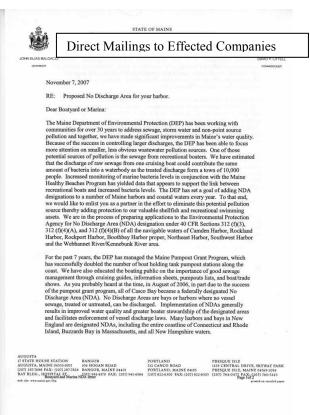
number above immediately.

# Maptech Embassy Cruising Guide to the New England Coast 7th Edition 2007









The application process to the Environmental Protection Agency takes a number of months, so we are starting the process this fall in the hopes of the harbors being designated next summer. At this time, we are seeking your input and support. Although not essential, we sincerely want this to be a cooperative effort. In the several months, we will be gathering data no host population and usage that is submitted to the EPA as part of the NDA petition. We hope to submit the applications in February, 2008.

If designated, NDAs in these harbors would mean greater pumpout system demand and greater scrutiny of all boat waste. The DEP will also be seeking input on an education and enforcement plan specific to each harbor. As stewards of Maine's productive marine resources, your input and participation in the NDA process will be invaluable.

I would like to hear from you regarding the DEPs plan for these NDAs. I have included the DEP's NDA fact sheet for your information. If you have questions, please do not hesitate to contact me at 287-7905 or pamela.d.parker@maine.gov. Please send written comments to me at the address below by November 30, 2007. I look forward to hearing

Sincerely,
Pamela Parker
No Discharge Area and Pumpout Grant Program Coordinator
Maine Department of Environmental Protection
17 SHS

Augusta, ME 04333-0017

David Etnier, DMR Ann Rodney, USEPA Town of Boothbay Harbor Town of Camden Town of Kennebunk Town of Kennebunkport Town of Mount Desert Town of Rockland Town of Rockport
Town of Southwest Harbor
Town of Wells

n/Aquaculture NDA letter

The application process to the Environmental Protection Agency takes a number of months, so we are starting the process this fall in the hopes of the harbors being designated next summer. At this time, we are seeking your input and support. Although not essential, we sincerely want this to be a cooperative effort. In the several months, we will need data from the harbormasters and marinas on boat population and usage that is submitted to the EPA for their review of the NDA petition. We hope to submit the application for your area in February, 2008.

If designated, a NDA in your harbor would mean greater pumpout system demand. It will be essential for all pumpout station locations to maintain the pumpout stations well, and repair them promptly if they break. To this end, the DEP is pursuing a pilot program in Casco Bay that would provide pumpout station inspection and maintenance free of charge to the facility. If this program is successful for all involved, the DEP would pursue the same arrangement in all NDAs. The DEP will also be seeking input on an education and enforcement plan specific to your harbor.

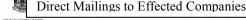
I would like to hear from you regarding the DEPs plan for a NDA in your area. I have included the DEP's NDA fact sheet for your information. If you are interested in purchasing or upgrading a pumpout station, I am happy to send you out a grant application package. If you have questions, please do not hesitate to contact me at 287-7905 or pamela.d.parker@maine.gov. Please send written comments to me at the address below by November 30, 2007. 1 look forward to hearing from you.

Pamels Farker
Pa

Augusta, ME 04333-0017

Ann Rodney, USEPA
Town of Boothbay Harbor
Town of Camden
Town of Kennebunk
Town of Kennebunk
Town of Kennebunk
Town of Mount Desert
Town of Rockland
Town of Rockport
Town of Southwest Harbor
Town of Wells

STATE OF MAINE



November 7, 2007

RE: Proposed No Discharge Areas.

Dear Fishermen:

Dear Fishermen:

The Maine Department of Environmental Protection (DEP) has been working with communities for over 30 years to address sewage, storm water and non-point source pollution and together, we have made significant improvements in Maine's water quality. Because of the success in controlling larger discharges, the DEP has been able to focus more attention on smaller, less obvious wastewater pollution sources. One of those potential sources of pollution is the sewage from recreational boaters. We have estimated that the discharge of raw sewage from boats could contribute the same amount of bacteria to a waterbody as the treated discharge form a town of 10,000 people. Increased monitoring of marine bacteria levels in conjunction with the Maine Healthy Beaches Program has yielded data that appears to support the link between crecreational boats and increased bacteria levels. The DEP has set a goal of adding NDA designations to a number of Maine harbors and coastal waters every year. To that end, we would like to enlist you as a partner in the effort to eliminate this potential pollution source thereby adding protection to our valuable shellfish and aqueaculture assets. We are in the process of preparing applications to the Environmental Protection Agency for No Discharge Area (NDA) designation under 40 CFR Sections 312 (Q16), 312 (Q16), 34, and 312 (Q16)(B1) of all the navigable waters of Camden Harbor, Rockland Harbor, Rockport Harbor, Boodshby Harbor proper, Kortheast Harbor, Southwest Harbor and the Webhannet River/Kennebunk River area.

For the past 7 years, the DEP has managed the Maine Pumpout Grant Program, which has successfully doubled the number of boat holding tank pumpout stations along the coast. We have also educated the boating public on the importance of good sewage management through cruising guides, information sheets, pumpouts lists, and boat/trade shows. As you probably heard at the time, in August of 2006, in part due to the success of the pumpout grant program, all of Casco Bay became a federally designated No Discharge Area (NDA). No Discharge Area are bays or harbors where no vessel sewage, treated or untreated, can be discharged. Implementation of NDAs generally results in improved water quality and greater boater stewardship of the designated areas and facilitates enforcement of vessel discharge laws. Many harbors and bays in New England are designated NDAs, including the entire coastline of Connecticut and Rhode Island, Buzzards Bay in Massachusetts, and all New Hampshire waters.

N. HOUSE STATION BANGOR N. MAINE 04333-0017 106 HOGAN ROAD 7688 FAX: (207) 287-7826 BANGOR, MAINE 04401 G., HOSPITAL ST. (207) 491-4570 FAX: (207) FEBERMENT AQUICULTURE NDA TERIC

PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARK PRESQUE ISLE, MAINE 04769-2004 (207) 764-047, FAX: [207) 760-3143. Page 1012



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# **Direct Mailings to Effected Companies**

November 7, 2007

RE: Proposed No Discharge Areas.

Dear Commercial Passenger Vessel Owners:

The Maine Department of Environmental Protection (DEP) has been working with communities for over 30 years to address sewage, storm water and non-point source pollution and together, we have made significant improvements in Maine's water quality. Because of the success in controlling larger discharges, the DEP has been able to focus more attention on smaller, less obvious wastewater pollution sources. One of those potential sources of pollution is the sewage from recreational boaters. We have estimated that the discharge of raw sewage from boats could contribute the same amount of bacteria into a waterbody as the treated discharge from a town of 10,000 people. Increased monitoring of marine bacteria levels in conjunction with the Maine Healthy Beaches Program has yielded data that appears to support the link between recreational boats and increased bacteria levels. The DEP has set ago alo a fading NDA designations to a number of Maine harbors and coastal waters every year. To that end, we would like to emist you as a partner in the effort to eliminate this potential pollution source thereby adding protection to our valuable shellfish and aquaculture assets. We are in the process of preparing applications to the Environmental Protection Agency for No Discharge Area (NDA) designation under 40 CFR Sections 312 (f)(3), 312 (f)(4)(A), and 312 (f)(4)(B) of all the navigable waters of Camden Hurbor, Rockland Harbor, Rockport Harbor, Boothbay Harbor proper, Northeast Harbor, Southwest Harbor and the Webhannet River/Kemebunk River area. The Maine Department of Environmental Protection (DEP) has been working with

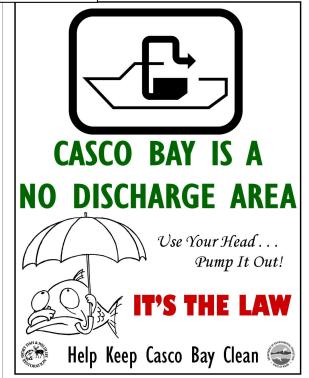
For the past 7 years, the DEP has managed the Maine Pumpout Grant Program, which has successfully doubled the number of boat holding tank pumpout stations along the coast. We have also educated the boating public on the importance of good sewage management through crusings quides, information sheets, pumpouts lists, and boat/rade shows. As you probably heard at the time, in August of 2006, in part due to the success of the pumpout grant program, all of Casoo Bay becemae a federally designated No Discharge Area (NDA). No Discharge Areas are bays or harbors where no vessel sewage, treated or untreated, each be discharged. Implementation of NDAs generally results in improved water quality and greater boater stewardship of the designated areas and facilitates enforcement of vessel discharge laws. Many harbors and bays in New England are designated NDAs, including the entire coastline of Connecticut and Rhode Island, Buzzards Bay in Massachusetts, and all New Hampshire waters.

BANGOR 7 106 HOGAN ROAD 7826 BANGOR, MAINE 04401 (207) 9414570 FAX: (207) 941

PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARB PRESQUE ISLE, MAINE 04769-2094 (207) 764-0477,FAY, 5/207) 760-3143 Page 1012

# Signage provided by MEDEP





Boater Survey



# DEP FACT SHEET

No Discharge Areas in Maine

Updated: September 2007 Contact: Pam Parker (207) 287-7905

What is a "No Discharge Area"?

A "No Discharge Area (NDA) is a designated body of water (by the State) where discharge of treated or untreated sewage from all vessels is completely prohibited.

Does a NDA prohibit ALL discharges from vessels?

No, only sewage (toilet waste alt a blackwater) or discharges that combine wastewaters are prohibited. Vessels may still discharge graywater alone, unless they are a large commercial passenger vessel like an ocean liner or cruise ship. Graywater is the wastewater from sinks, showers and on-board laundries. On small vessels the blackwater and graywater systems are normally separate. In larger vessels, the wastewater is often combined. The combined discharge of blackwater and graywater whether treated or untreated is also prohibited.

What happens to boats operating in NDAs?

In general, all boats with installed toilets must have an approved and operable Marine Sanitation
Device (MSD). The table below describes the different MSDs. Boats without installed toilets are

	Types of Marine Sanitation	Devices
MSD Type	Vessel Length	Effluent Treatment Standard
Type I	Less than or equal to 65 feet long	Fecal coliform bacteria less than 1000 colonies per 100ml. No visible floating solids
Туре П	Greater than 65 feet long	Fecal coliform bacteria less than 200 colonies per 100 ml. Total suspended solids less than 150 mg per litre.
Type III (Holding Tank)	Any	No discharge

In NDAs all vessels must hold their blackwater until it is pumped out at a holding tank pumpout facility. If the vessel is equipped with a type I or II MSD, the vessel must be secured to prevent discharge and may be retrofitted with a holding tank (Type III MSD).

Are sewage treatment plants or other land based discharges affected by NDAs?
No. Discharges from land based sources are not affected by the NDA.

Why does the State want to designate NDAs?

Certain harbors or bays may need additional protection from pollution in order to protect, maintain or improve water quality. Designating a harbor or bay a NDA will help reduce sewage pollution from boats, decreasing pathogens, solids and nutrients in the water.

airal a your answer.	Pleaso airaio your answor.
e this mailing did you know about No Dischange Areas? Y N	Before this mailing did you know about No Discharge Areas? ${ m Y}$
e this mailing, did you know Casco Bay was a NDA? Y	Before this mailing, did you know Cusco Bay was a NDA? Y
you boathave an installed toilet? Y N	Does you boat have an installed toilet? Y N
said "yes" to $\#3$ , is your boat in complaince with the NDA ements? $\stackrel{\circ}{Y}$	If you said "yes" to $\#3$ , is your boat in complaince with the NDA requirements? $Y=N$
OU suggest the DEP, local authorities and the marines do that the NDA is of feetive?	What would YOU suggest the DEP, local authorities and the marinas do to help ensure that the NDA is offeetive?
our answer.	Picaso circle your answer.
ailing did you know about No Discharge Areas? N	Before this mailing did you know about No Dischange Areas? Y
aiting, did you know Casco Bay was a NDA? Y	Before this mailing, did you know Cusco Bay was a NDA? $Y = \frac{1}{N}$
you boat have an installed toilet? $-\mathbf{Y} = \mathbf{N}$	Does you boat have an installed toilet? $-\mathbf{Y} = -\mathbf{N}$
said "yes" to #3, is your bost in complaince with the NDA ements? $Y = N$	If you said "yes" to $\#3$ , is your boat in complaince with the NDA requirements? Y
would YOU suggest the DEB joeal authorities and the marinas do ensure that the NDA is offective?	What would YOU suggest the DEP, focal authorites and the marries do to help ensure that the NDA is of feetive?



# A New England Boaters Guide to No Discharge Areas



Introduction

One of EPA New England's highest priorities is to protect public health and the environment by eliminating bacterial contamination of our surface waters. Designating No Discharge Areas (NDAs) prohibits servage discharged within its boundaries, protecting the costiline and upholding overall cleaner water qualify standards. New England knows the importance of this and is leading the country in designating NDAs. All coastal waters in Connecticut; Rhade Island; New Hampshire; Casco Bay, Maine and much of Massachurests are currently NDAs and we are looking forward to New England's entire coastline having this same protection.

What is a No Discharge Area?

A No Discharge Area (NDA) is a designated body of water where the discharge of treated and untreated boat sewage is prohibited (does not include grey water). Under the Federal Clean Water Act it is illegal to discharge untreated (raw) sewage from a vessel in US waters.

### **Health Protection**

I from boats degrade water quality by introducing disease-causing microorganisms, nutrients, and environment.

Microorganisms, which include viruses and bacteria, may introduce diseases like hepatitis and gastroenteritis to people in contact with the water. Microorganisms may also contaminate shellfish beds and cause beach closures. Nutrients are necessary for the growth of both microscopic and larger plants/seaweds and eelgrass). However, when nutrients become too abundant they stimulate algoe blooms which may lead to the loss of eelgrass and depletion of axygen in water (called hypoxia). Hypoxia can stress and even kill fish and other aquatic animals.

Chemical products can be toxic to marine and estuarine life and could pose a problem in areas where boats congregate and where there is little tidal flushing.



### Marine Sanitation Devices (MSDs)... or Boat Toilets

Recreational boots are not required to be equipped with a tailet, but if they are, the Main Sanithation Device (MSD) must be Coast Quard approved. The approved design requires the MSDs to hald sewage for shore-based disposal or heat the sewage prior to discharge There are three types of MSDs:



TYPE I: MSDs discharge treated effluent having a fecal coliform bacterial count not greater than 1000 per 100 mill and no visible floating solids.

TYPE III: MSDs are devices designed to store sewage (assolly with disinfectants and deadorants added) with it can be pumped out at a pumpout facility or discharged outside the territorial sea boundary of three miles from share. These are also known as hold-ing tanks.

# Boat Waste in a No Discharge Area

When operating in a No Discharge Area, Type II, Type II, and Type III Marine Sanitation Devices cannot be discharged. In No Discharge Areas, the US Coast Guard regulations state MSDs Type I and II must be secured to prevent discharge.

A Type I and Type II MSDs must be secured when operating in a No Discharge Area. This can be done by closing the seacock and padlocking it, using a non-releasable wire fie, locking the door handle lock or removing the seacock handle.

# For More Information

State Web sites
MA: wow.mess.gov/czm/ndo/pumpaoth
NA: wow.mess.gov/czm/ndo/pumpaoth
NA: wow.des.state.nh.ux/omb/c/ox/dir.mop.htm
Rb: wow.dem.di.gov/programs/benvicen/worler/shalfs/pump
Rb: wow.dem.ni.gov/dep/bl/m/ppic/rests/ndo
CT: www.deg/ob/dep/comp/leen.aspte-a=7058a=399328&depNov\_GID=1620

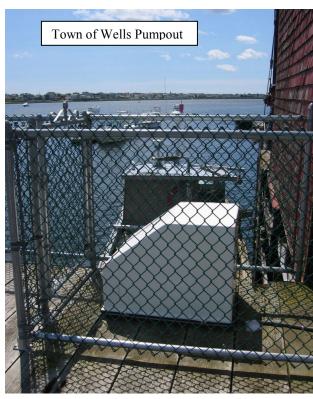




# APPENDIX C Pumpout Facility Photos







# References

Maine Healthy Beaches Program "Beach Status and Data, Actual Enterococci Values Measured at Sites by Date", <a href="http://www.mainecoastdata.org/public/monitoringData.aspx?id=1057">http://www.mainecoastdata.org/public/monitoringData.aspx?id=1057</a> page updated 10/16/2008, 11/10/2008

"South Shore Pumpout Evaluation & Outreach Plan", Urban Harbors Institute and North & South Rivers Watershed Association, Boston, MA, June 2004

This report is available online at www.uhi.umb.edu